



PEM-1000 SZÉRIA - ÁRAMLÁSMÉRŐ

Elektromágneses (Magflow)

PEMDN0040PN16.1

ALW 4–20 mA, DN40, PN16, 316TI/PTFE

- 0,085..28,274,3 m³/h
- 3/8" - 40" csatlakozási méret
- 1,6 MPa
- Savak, alkális, festékek, ragasztók, víz stb.
- 4-20mA vagy Impulzus/frekvencia



TERMÉKLEÍRÁS

Az Aplis PEM-1000 elektromágneses áramlásmérő egy rendkívül robusztus, nagy pontosságú áramlásmérő.

A minimális vezetőképesség 5 µS/cm, és például savak, festékek, paszták, víz és szennyvíz esetében használják.

Savak

Festékek

Paszták

Víz, szennyvíz stb.

MŰSZAKI ADATOK

Csatlakozás	DN40 PN16
IP-osztály	IP67
Jeltípus	4–20 mA
Környezeti hőmérséklet eddig:	60 °C
Környezeti hőmérséklet ettől:	-20 °C
Közeghőmérséklet eddig:	130 °C
Közeghőmérséklet ettől:	-25 °C
Max. nyomásellenállás	16 bar
Max. tápfeszültség, AC	260 V AC
Méréstechnológia	Elektromágneses
Min. tápfeszültség, AC	90 V AC
Osztályozási pontosság	A skálaérték ± 0,5%-a az EN 837-1-nek megfelelően
Test anyaga	Carbon steel

Vízzel érintkező alkatrészek anyaga

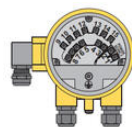
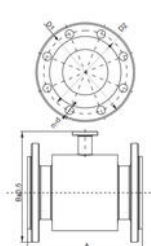
3,5 kg

PTFE



Technical drawings of the 1000 Series 1/2" components. The left drawing shows a side view of a yellow component with a grey base, with dimensions 169 (height) and 213 (width). The right drawing shows a front view of a yellow component with a grey base, with dimensions 184-213 (width) and a double-headed arrow indicating a range of motion.

DN	Pin	Dimensions [mm]						Weight
		A	B	D1	D2	n	g	
15	200	150	100	125	125	4	8	2.3
20	200	175	105	145	145	4	8	3.5
25	200	187	115	165	165	4	8	5.5
32	250	200	140	180	180	4	8	8
40	250	225	150	210	210	4	8	12
50	250	250	160	225	225	4	8	17.5
63	300	280	180	250	250	4	8	25
80	300	300	200	280	280	4	8	37.5
100	300	325	220	300	300	4	8	50
125	350	350	250	325	325	4	8	67.5
160	400	400	280	360	360	4	8	100
200	450	450	315	400	400	4	8	137.5
250	500	500	350	450	450	4	8	187.5
315	560	560	390	500	500	4	8	250
400	630	630	425	560	560	4	8	337.5
500	710	710	460	630	630	4	8	437.5
630	800	800	500	710	710	4	8	562.5
800	900	900	560	800	800	4	8	712.5
1000	1000	1000	600	900	900	4	8	875
1250	1125	1125	660	1000	1000	4	8	1062.5
1600	1250	1250	725	1125	1125	4	8	1375
2000	1400	1400	800	1250	1250	4	8	1750
2500	1600	1600	900	1400	1400	4	8	2250
3150	1800	1800	1000	1600	1600	4	8	2812.5
4000	2000	2000	1100	1800	1800	4	8	3500
5000	2250	2250	1225	2000	2000	4	8	4375
6300	2500	2500	1350	2250	2250	4	8	5437.5
8000	2800	2800	1500	2500	2500	4	8	6875
10000	3150	3150	1675	2800	2800	4	8	8687.5
12500	3500	3500	1875	3150	3150	4	8	10812.5
16000	4000	4000	2100	3600	3600	4	8	13750
20000	4500	4500	2375	4000	4000	4	8	17187.5
25000	5000	5000	2625	4500	4500	4	8	21250
31500	5600	5600	2900	5000	5000	4	8	26062.5
40000	6300	6300	3150	5600	5600	4	8	32500
50000	7100	7100	3500	6300	6300	4	8	40312.5
63000	8000	8000	3850	7100	7100	4	8	50000
80000	9000	9000	4250	8000	8000	4	8	61875
100000	10000	10000	4750	9000	9000	4	8	75625
125000	11250	11250	5250	10000	10000	4	8	91875
160000	12500	12500	5875	11250	11250	4	8	111875
200000	14000	14000	6500	12500	12500	4	8	135625
250000	16000	16000	7250	14000	14000	4	8	164062.5
315000	18000	18000	8000	15600	15600	4	8	196875
400000	20000	2000						



	Terminal	Description
Power supply	2	90...280V AC (1)
	3	0V, 0-30V DC (on request)
Binary output 1	4	reverse polarity protection, galvanic insulation, passive
	5	reverse polarity protection, galvanic insulation, passive
Pulse/frequency output	6	passive
Current output 4-20 mA	8	(+)
	9	(-) active (passive on request)
	10	RS 485 A
	11	RS 485 B
Communication	12	RS 485 GND/shield
Binary input (passive)	13	reverse polarity protection, galvanic insulation
	14	reverse polarity protection, galvanic insulation
Binary output 2	15	reverse polarity protection, galvanic insulation

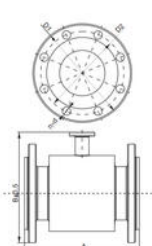
		Dimensions [mm]							Weight
Size	FR	A	B	C	D	E	F	G	
15	150	135	95	80	14	4	8	2.5	
15	150	135	95	85	14	4	8	2.5	
20	200	180	125	105	16	5	10	3.5	
25	250	230	160	135	18	6	12	5.5	
30	300	280	190	165	20	7	14	7.5	
40	400	360	240	200	24	8	18	12	
50	500	450	290	240	28	10	22	18	
60	600	540	340	280	32	12	26	24	
70	700	630	390	320	36	14	30	30	
80	800	730	440	360	40	16	34	36	
90	900	830	490	400	44	18	38	42	
100	1000	930	540	440	48	20	42	48	
120	1200	1130	640	520	56	24	50	60	
150	1500	1430	790	640	68	28	62	75	
200	2000	1880	990	800	84	36	80	100	
250	2500	2330	1240	1000	100	44	100	125	
300	3000	2780	1490	1200	116	52	120	150	
350	3500	3230	1740	1400	132	60	140	175	
400	4000	3680	1990	1600	148	68	160	200	
450	4500	4130	2240	1800	164	76	180	225	
500	5000	4580	2490	2000	180	84	200	250	
550	5500	5030	2740	2200	196	92	220	275	
600	6000	5480	2990	2400	212	100	240	300	
650	6500	5930	3240	2600	228	108	260	325	
700	7000	6380	3490	2800	244	116	280	350	
750	7500	6830	3740	3000	260	124	300	375	
800	8000	7280	3990	3200	276	132	320	400	
850	8500	7730	4240	3400	292	140	340	425	
900	9000	8180	4490	3600	308	148	360	450	
950	9500	8630	4740	3800	324	156	380	475	
1000	10000	9080	4990	4000	340	164	400	500	

		Dimensiones [mm]					Wt[kg]
DN	PN	A	B	D1	D2	n	Wt[kg]
15	150	153	80	60	14	4	2,5
15	40	153	80	60	14	4	2,5
20	200	180	100	75	14	4	3,5
25	250	187	110	85	14	4	3,5
32	320	190	140	110	16	4	5,0
40	400	195	150	120	18	4	6,0
50	500	181	165	125	18	4	8,0
63	630	200	180	140	20	4	10,0
80	800	224	200	160	20	8	9,3
100	1000	250	225	180	22	8	12,0
125	1250	265	250	190	22	8	17,0
150	1500	280	275	200	24	8	20,0
200	2000	305	300	220	26	8	30,0
250	2500	320	325	230	30	8	35,0
300	3000	340	350	240	32	8	42,0
350	3500	360	375	250	32	8	50,0
400	4000	380	400	260	34	8	58,0
450	4500	400	425	270	36	8	68,0
500	5000	420	450	280	36	8	78,0
600	6000	460	500	310	36	16	85,0
650	6500	475	525	320	36	16	95,0
700	7000	490	550	330	36	16	105,0
800	8000	520	575	340	36	20	120,0
900	9000	550	600	350	36	20	135,0
1000	10000	580	625	360	36	20	150,0
1200	12000	630	675	380	40	20	180,0
1400	14000	680	725	400	40	20	210,0
1500	15000	700	750	420	40	20	230,0



Technical drawings of the 1000 Series 1/2" valve. The left drawing is a top view showing a circular valve body with a central port and a side port. Dimensions are indicated: 159 for the overall diameter and 213 for the side port diameter. The right drawing is a side view showing the valve's profile with a handle on the right. Dimensions are indicated: 194-213 for the overall height and 159 for the diameter of the main body.

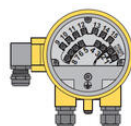
		Dimensions [mm]						Weight
DN	PN	A	B	D1	D2	d	n	kg
15		150	150	150	150	150	150	150
20		200	200	200	200	200	200	200
25		250	250	250	250	250	250	250
32		320	320	320	320	320	320	320
40		400	400	400	400	400	400	400
50		500	500	500	500	500	500	500
63		630	630	630	630	630	630	630
80		800	800	800	800	800	800	800
100		1000	1000	1000	1000	1000	1000	1000
125		1250	1250	1250	1250	1250	1250	1250
160		1600	1600	1600	1600	1600	1600	1600
200		2000	2000	2000	2000	2000	2000	2000
250		2500	2500	2500	2500	2500	2500	2500
315		3150	3150	3150	3150	3150	3150	3150
400		4000	4000	4000	4000	4000	4000	4000
500		5000	5000	5000	5000	5000	5000	5000
630		6300	6300	6300	6300	6300	6300	6300
800		8000	8000	8000	8000	8000	8000	8000
1000		10000	10000	10000	10000	10000	10000	10000
1250		12500	12500	12500	12500	12500	12500	12500
1600		16000	16000	16000	16000	16000	16000	16000
2000		20000	20000	20000	20000	20000	20000	20000
2500		25000	25000	25000	25000	25000	25000	25000
3150		31500	31500	31500	31500	31500	31500	31500
4000		40000	40000	40000	40000	40000	40000	40000
5000		50000	50000	50000	50000	50000	50000	50000
6300		63000	63000	63000	63000	63000	63000	63000
8000		80000	80000	80000	80000	80000	80000	80000
10000		100000	100000	100000	100000	100000	100000	100000
12500		125000	125000	125000	125000	125000	125000	125000
16000		160000	160000	160000	160000	160000	160000	160000
20000		200000	200000	200000	200000	200000	200000	200000
25000		250000	250000	250000	250000	250000	250000	250000
31500		315000	315000	315000	315000	315000	315000	315000
40000		400000	400000	400000	400000	400000	400000	400000
50000		500000	500000	500000	500000	500000	500000	500000
63000		630000	630000	630000	630000	630000	630000	630000
80000		800000	800000	800000	800000	800000	800000	800000
100000		1000000	1000000	1000000	1000000	1000000	1000000	1000000
125000		1250000	1250000	1250000	1250000	1250000	1250000	1250000
160000		1600000	1600000	1600000	1600000	1600000	1600000	1600000
200000		2000000	2000000	2000000	2000000	2000000	2000000	2000000
250000		2500000	2500000	2500000	2500000	2500000	2500000	2500000
315000		3150000	3150000	3150000	3150000	3150000	3150000	3150000
400000		4000000	4000000	4000000	4000000	4000000	4000000	4000000
500000		5000000	5000000	5000000	5000000	5000000	5000000	5000000
630000		6300000	6300000	6300000	6300000	6300000	6300000	6300000
800000		8000000	8000000	8000000	8000000	8000000	8000000	8000000
1000000		10000000	10000000	10000000	10000000	10000000	10000000	10000000
1250000		12500000	12500000	12500000	12500000	12500000	12500000	12500000
1600000		16000000	16000000	16000000	16000000	16000000	16000000	16000000
2000000		20000000	20000000	20000000	20000000	20000000	20000000	20000000
2500000		25000000	25000000	25000000	25000000	25000000	25000000	25000000
3150000		31500000	31500000	31500000	31500000	31500000	31500000	31500000
4000000		40000000	40000000	40000000	40000000	40000000	40000000	40000000
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6300000		63000000	63000000	63000000	63000000	63000000	63000000	63000000
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12500000		125000000	125000000	125000000	125000000	125000000	125000000	125000000
16000000		160000000	160000000	160000000	160000000	160000000	160000000	160000000
20000000		200000000	200000000	200000000	200000000	200000000	200000000	200000000
25000000		250000000	250000000	250000000	250000000	250000000	250000000	250000000
31500000		315000000	315000000	315000000	315000000	315000000	315000000	315000000
40000000		400000000	400000000	400000000	400000000	400000000	400000000	400000000
50000000		500000000	500000000	500000000	500000000	500000000	500000000	500000000
63000000		630000000	630000000	630000000	630000000	630000000	630000000	630000000
80000000		800000000	800000000	800000000	800000000	800000000	800000000	800000000
100000000		1000000000	1000000000	1000000000	1000000000	1000000000	1000000000	1000000000
125000000		1250000000	1250000000	1250000000	1250000000	1250000000	1250000000	1250000000
160000000		1600000000	1600000000	1600000000	1600000000	1600000000	1600000000	1600000000
200000000		2000000000	2000000000	2000000000	2000000000	2000000000	2000000000	2000000000
250000000		2500000000	2500000000	2500000000	2500000000	2500000000	2500000000	2500000000
315000000		3150000000	3150000000	3150000000	3150000000	3150000000	3150000000	3150000000
400000000		4000000000	4000000000	4000000000	4000000000	4000000000	4000000000	4000000000
500000000		5000000000	5000000000	5000000000	5000000000	5000000000	5000000000	5000000000
630000000		6300000000	6300000000	6300000000	6300000000	6300000000	6300000000	6300000000
800000000		8000000000	8000000000	8000000000	8000000000	8000000000	8000000000	8000000000
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1600000000		16000000000	16000000000	16000000000	16000000000	16000000000	16000000000	16000000000
2000000000		20000000000	20000000000	20000000000	20000000000	20000000000	20000000000	20000000000
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6300000000		63000000000	63000000000	63000000000	63000000000	63000000000	63000000000	63000000000
8000000000		80000000000	80000000000	80000000000	80000000000	80000000000	80000000000	80000000000
10000000000		100000000000	100000000000	100000000000	100000000000	100000000000	100000000000	100000000000
12500000000		125000000000	125000000000	125000000000	125000000000	125000000000	125000000000	125000000000
16000000000		160000000000	160000000000	160000000000	160000000000	160000000000	160000000000	160000000000
20000000000		200000000000	200000000000	200000000000	200000000000	200000000000	200000000000	200000000000
25000000000		250000000000	250000000000	250000000000	250000000000	250000000000	250000000000	250000000000
31500000000		315000000000	315000000000	315000000000	315000000000	315000000000	315000000000	315000000000
40000000000		400000000000	400000000000	400000000000	400000000000	400000000000	400000000000	400000000000
50000000000		500000000000	500000000000	500000000000	500000000000	500000000000	500000000000	500000000000
63000000000		630000000000	630000000000	630000000000	630000000000	630000000000	630000000000	630000000000
80000000000		800000000000	800000000000	800000000000	800000000000	800000000000	800000000000	800000000000
100000000000		1000000000000	1000000000000	1000000000000	1000000000000	1000000000000	1000000000000	1000000000000
125000000000		1250000000000	1250000000000	1250000000000	1250000000000	1250000000000	1250000000000	1250000000000
160000000000		1600000000000	1600000000000	1600000000000	1600000000000	1600000000000	1600000000000	1600000000000
200000000000		2000000000000	2000000000000	2000000000000	2000000000000	2000000000000	2000000000000	2000000000000
250000000000		2500000000000	2500000000000	2500000000000	2500000000000	2500000000000	2500000000000	2500000000000
315000000000		3150000000000	3150000000000	3150000000000	3150000000000	3150000000000	3150000000000	3150000000000
400000000000		4000000000000	4000000000000	4000000000000	4000000000000	4000000000000	4000000000000	4000000000000
500000000000		5000000000000	5000000000000	5000000000000	5000000000000	5000000000000	5000000000000	5000000000000
630000000000		6300000000000	6300000000000	6300000000000	6300000000000	6300000000000	6300000000000	6300000000000
800000000000		8000000000000	8000000000000	8000000000000	8000000000000	8000000000000	8000000000000	8000000000000
1000000000000		10000000000000	10000000000000	10000000000000	10000000000000	10000000000000	10000000000000	10000000000000
1250000000000		12500000000000	12500000000000	125000000				



DN 10 – DN 150 $A \pm 5 \text{ mm}$
DN 200 – DN 1000 $A \pm 10 \text{ mm}$

DN	PN	A	Dimensions [mm]					Weight
			B	C	D	E	F	
50	100	151	80	80	74	4	74	1.4
50	200	155	95	85	74	4	8	1.5
50	300	155	105	95	85	4	8	1.6
50	400	155	115	85	85	4	8	1.8
50	500	155	120	100	100	18	8	2.0
50	600	155	120	110	110	18	8	2.2
50	800	201	151	125	125	4	7	2.4
50	1000	209	185	145	145	8	8	2.8
50	1250	224	195	155	155	8	8	3.2
50	1500	250	245	205	190	22	8	3.5
125	200	278	270	220	220	8	13	4.2
125	300	308	305	255	255	8	13	5.2
125	400	325	305	275	275	8	13	5.8
125	500	325	305	315	315	8	13	6.2
125	600	400	425	335	335	12	16	8.2
125	800	481	435	365	365	16	16	10.2
125	1000	542	505	400	400	16	16	11.8
125	1250	600	620	550	550	16	16	13.2
125	1500	657	670	600	600	16	16	14.8
125	2000	770	770	660	660	20	16	18.2
125	2500	827	835	730	730	20	16	20.2
125	3000	800	1050	1025	900	48	24	23.2
125	4000	800	1145	1135	1030	48	24	25.2
125	5000	1000	1285	1275	1170	48	24	30.2

DN 200 - DN 1000 A ± 10 mm							
DN		Dimensions [mm]					Weight
2n	A	B	D1	D2	n	k	
15	150	153	80	60	14	4	2,5
15	200	203	100	80	14	4	3,2
20	200	203	100	80	14	4	3,2
20	250	253	115	95	14	4	3,5
25	250	253	115	95	14	4	3,5
30	300	303	130	110	14	4	4
30	350	353	145	125	14	4	4,7
40	400	403	160	140	14	4	5,5
40	450	453	175	155	14	4	6,3
50	500	503	190	170	14	4	7,5
60	600	603	215	195	14	4	9,5
80	800	803	240	220	14	4	13
100	1000	1003	265	245	14	4	16,5
120	1200	1203	290	270	14	4	20
150	1500	1503	305	285	20	20	20
200	2000	2003	320	300	20	20	22
250	2500	2503	335	315	20	20	26
300	3000	3003	350	330	20	20	30
400	4000	4003	365	345	20	20	36
500	5000	5003	380	360	20	20	42
600	6000	6003	395	375	20	20	48
800	8000	8003	410	390	20	20	56
1000	10000	10003	425	405	20	20	64



	Terminal	Description
Power supply	2	90...26V AC
	3	10...36V DC
Binary output 1	3	reverse polarity protection, galvanic insulation, passive
Pulse/frequency output	4	reverse polarity protection, galvanic insulation, passive
Current output 4-20 mA	7	(+)
	8	(-) (passive on request)
Communication	9	RS 485 A
	10	RS 485 B
	11	RS 485 C
Binary input (passive)	13	GND / shield
Binary input 1	13	reverse polarity protection, galvanic insulation
Binary output 2	14	reverse polarity protection, galvanic insulation

DN	v=0.3m/s	v=0.6m/s	v=0.9m/s	v=1.2m/s	v=1.5m/s	v=1.8m/s
10	0.085	0.261	0.348	1.474	2.282	2.827
15	0.181	0.548	1.009	2.655	1.811	3.817
20	0.277	0.831	1.531	3.922	2.717	5.723
25	0.376	1.267	2.551	8.836	14.337	17.871
30	0.474	1.699	3.571	12.750	20.250	24.785
40	0.757	2.584	5.122	22.679	35.019	45.229
50	1.231	7.899	21.206	35.343	56.349	76.369
60	1.705	11.843	30.339	50.457	78.667	106.687
80	2.429	19.799	54.297	90.478	144.300	188.769
100	3.153	27.755	78.255	130.499	212.500	276.789
125	3.754	34.079	94.374	205.839	263.300	343.969
150	4.355	40.399	110.499	281.179	338.600	440.149
175	4.956	46.719	126.619	356.519	413.900	536.329
200	5.557	53.039	142.739	431.859	489.200	632.509
225	6.158	59.359	158.859	507.199	564.500	728.689
250	6.759	65.679	174.979	582.539	639.800	824.869
275	7.360	71.999	191.099	657.879	715.100	921.049
300	7.961	78.319	207.219	733.219	790.400	1017.229
350	9.562	94.339	248.339	883.339	940.500	1227.309
400	11.163	110.359	289.359	1033.359	1090.600	1437.389
450	12.764	126.379	330.379	1183.379	1240.700	1647.469
500	14.365	142.399	371.399	1333.399	1390.800	1857.549
550	15.966	158.419	412.419	1483.419	1540.900	2067.629
600	17.567	174.439	453.439	1633.439	1691.000	2277.709
650	19.168	190.459	494.459	1783.459	1841.100	2487.789
700	20.769	206.479	535.479	1933.479	1991.200	2697.869
750	22.370	222.499	576.499	2083.499	2141.300	2907.949
800	23.971	238.519	617.519	2233.519	2291.400	3118.029
850	25.572	254.539	658.539	2383.539	2441.500	3328.109
900	27.173	270.559	699.559	2533.559	2591.600	3538.189
950	28.774	286.579	740.579	2683.579	2741.700	3748.269
1000	30.375	302.599	781.599	2833.599	2891.800	3958.349

Standard Gms and recommended Qmax range		
DN	Standard Flow rate [m3/h]	Flow rate range [m3/h]
15	1	1 - 1.7
18	2	2 - 3.5
20	4	3.5 - 6.8
25	5	5 - 10.9
32	15	9 - 17.4
40	15	14 - 27.1
50	30	20 - 42.4
65	50	30 - 72
80	50	50 - 109
100	100	85 - 170
125	150	130 - 265
150	200	160 - 320
200	300	240 - 660
250	500	600 - 1000
300	700	760 - 1530
350	1000	1000 - 2090
400	1300	1300 - 2700
500	2000	2000 - 2700
600	3000	consult
800	5000	manufacturer
1000	8000	